

16) What type of epithelium does the loop of Henle have?

- a) Ciliated columnar
- b) Pseudostratified columnar
- c) Simple cuboidal
- d) Simple squamous
- e) Transitional

17) Herring bodies filled with oxytocin and vasopressin (ADH) are found in which of the following?

- a) Anterior pituitary
- b) Parathyroid gland
- c) Posterior pituitary
- d) Suprarenal gland
- e) Thyroid gland

18) TSH, ACTH, FSH and LH are produced by which of the following?

- a) Acidophils of the anterior pituitary
- b) Basophils of the anterior pituitary
- c) Hypothalamus
- d) Posterior pituitary
- e) Suprarenal gland

19) Which of the following hormones causes the production of milk?

- a) Aldosterone
- b) Cortisol
- c) Oxytocin
- d) Prolactin
- e) Somatostatin

~~20)~~ The presence of TSH promotes which of the following?

- a) Conjugation of T4 and T3 to thyroglobulin
- b) Production of T4 and T3
- c) Release of stored T4 and T3
- d) Release of iodine from T4 and T3
- e) Storage of T4 and T3 in follicles

21) Comparing the quantity produced and the potency of T4 and T3, which of the following is true?

- a) Both are equally potent
- b) Both are produced in approximately equal quantities
- c) There is more T3, T4 is stronger
- d) There is more T4, T3 is stronger

22) Marked hyperthyroidism is known as which of the following?

- a) Cushing's disease
- b) Goiter
- c) Grave's disease
- d) Hashimoto's disease
- e) Myxedema

23) Which of the following increases the amount of calcium in the blood?

- a) Aldosterone
- b) Calcitonin
- c) Cortisol
- d) Melatonin
- e) Parathyroid hormone

24) Which of the following is produced in the zona fasciculata?

- a) Aldosterone
- b) Calcitonin
- c) Cortisol
- d) Melatonin
- e) Parathyroid hormone

25) Which of the following is produced by the pineal gland?

- a) Aldosterone
- b) Calcitonin
- c) Cortisol
- d) Melatonin
- e) Parathyroid hormone

26) A nephron and its associated collecting duct form which of the following?

- a) Loop of Henle
- b) Major calyx
- c) Renal corpuscle
- d) Renal papilla

e) Uriniferous tubule

27) What is the name of the capillary tuft in the filtration system?

- a) Bowman's capsule
- b) Glomerulus
- c) Loop of Henle
- d) Renal column
- e) Renal papilla

28) What acts as the actual filter in the filtration process?

- a) Basal lamina
- b) Bowman's capsule
- c) Endothelium
- d) Filtration slit
- e) Juxtaglomerular cells

29) Which of the following cell types forms the filtration slits?

- a) Endothelium
- b) Juxtaglomerular
- c) Macula densa
- d) Podocyte
- e) Simple cuboidal

30) Reabsorption of glucose takes place in which of the following?

- a) Bowman's capsule
- b) Distal convoluted tubule
- c) Loop of Henle
- d) Macula densa
- e) Proximal convoluted tubule

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31) Which of the following secretes rennin to increase blood pressure?

- a) Bowman's capsule
- b) Juxtaglomerular cells
- c) Loop of Henle
- d) Macula densa
- e) Proximal convoluted tubule

32) Which of the following regulates blood flow in the afferent arteriole to control filtration rate?

- a) Bowman's capsule
- b) Juxtaglomerular cells
- c) Loop of Henle
- d) Macula densa
- e) Proximal convoluted tubule

33) Which of the following is characterized by microvilli and apical vacuoles?

- a) Bowman's capsule
- b) Juxtaglomerular cells
- c) Loop of Henle
- d) Macula densa
- e) Proximal convoluted tubule

34) Where does secretion of hydrogen ions into the urine for the regulation of pH occur?

- a) Collecting duct
- b) Distal convoluted tubule
- c) Loop of Henle
- d) Proximal convoluted tubule
- e) Renal corpuscle

35) What type of epithelium does the bladder have?

- a) Ciliated columnar
- b) Pseudostratified columnar
- c) Simple cuboidal
- d) Simple squamous
- e) Transitional

16) Which of the following differentiates serosa from adventitia?

- a) Definitive underlying external elastic lamina
- b) Peritoneal covering
- c) Presence of elastic fibers
- d) Presence of vasa vasorum
- e) Vasculature vs. GI tract

17) Which of the following exocrine glands is characterized by serous demilunes?

- a) Liver
- b) Pancreas
- c) Parotid
- d) Sublingual
- e) Submandibular

18) Which of the following exocrine glands is characterized by centroacinar cells?

- a) Liver
- b) Pancreas
- c) Parotid
- d) Sublingual
- e) Submandibular

19) Which of the following pancreatic cell types produces insulin?

- a) Alpha
- b) Beta
- c) Gamma
- d) G

20) Which of the following cell types produce surfactant?

- a) Alveolar macrophages
- b) Clara cells
- c) Kupffer cells
- d) Type 1 pneumocytes
- e) Types 2 pneumocytes

21) What is the function of the Fab fragment of an antibody?

- a) Binds to antigen
- b) Cleaved to activate the antibody
- c) Provides binding site for complement proteins
- d) Provides binding site for macrophages
- e) Transmembrane portion for attachment to B cell

22) Which of the following classes of antibodies is found in saliva, protects mucous membranes and provides passive immunity to infants?

- a) IgA
- b) IgD
- c) IgE
- d) IgG
- e) IgM

23) Which of the following cell types produce antibodies?

- a) Antigen presenting cells
- b) B cells
- c) Mast cells
- d) NK cells
- e) T cells

24) Which of the following molecules is responsible of the identification of "self" and triggers rejection responses in transplants?

- a) CD4
- b) IgE
- c) MHC I
- d) MHC II
- e) T cell receptor

25) Which of the following organs plays the most significant role in preventing autoimmune disease?

- a) Bone marrow
- b) Liver
- c) Lymph node
- d) Spleen
- e) Thymus



26) Plasma cells which are actively secreting antibodies are located in which portion of the lymph node?

- a) Cortex
- b) Medulla
- c) Medullary cords
- d) Paracortex
- e) Subcapsular space

27) Which of the following are the large lingual papillae found on the posterior aspect of the tongue which tend to retain taste molecules and are primarily responsible for sensing bitter compounds?

- a) Circumvalate
- b) Filiform
- c) Folate
- d) Fungiform

28) Which of the following cell types produces hydrochloric acid in the stomach?

- a) DNES
- b) Epithelial
- c) Oxyntic (parietal)
- d) Paneth
- e) Zymogenic (chief)

29) Which of the following cell types produces lysozyme in the small intestine?

- a) DNES
- b) Epithelial
- c) Oxyntic (parietal)
- d) Paneth
- e) Zymogenic (chief)

30) Which of the following is located between the layers of the muscularis externa and controls peristalsis?

- a) Auerbach's plexus
- b) DNES
- c) External elastic lamina
- d) Meissner's plexus
- e) Vasa vasorum

31) Which of the following types of epithelium is found in the trachea and bronchi?

- a) High cuboidal to low columnar
- b) Psuedostratified columnar
- c) Simple cuboidal
- d) Simple squamous

32) Which of the following types of epithelium is found in alveoli?

- a) High columnar
- b) High cuboidal to low columnar
- c) Psuedostratified columnar ←
- d) Simple cuboidal
- e) Simple squamous

33) Which of the following types of epithelium is found in intercalated and bile ducts?

- a) High columnar
- b) High cuboidal to low columnar
- ~~c) Psuedostratified columnar~~
- d) Simple cuboidal
- ~~e) Simple squamous~~

34) Which of the following types of epithelium is found in striated ducts?

- a) High columnar
- b) High cuboidal to low columnar
- c) Psuedostratified columnar
- d) Simple cuboidal
- ~~e) Simple squamous~~

35) Epithelium from which of the following structures is characterized by the presence of cilia and goblet cells with underlying secretory glands, smooth muscle and cartilage?

- a) Alveoli
- b) Bile ducts
- c) Sinusoids
- d) Stomach
- e) Trachea